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Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet

1

of 6

Complete if Known

Application Number	10/584,115
Filing Date	August 6, 2007
First Named Inventor	Malcolm Brown
Art Unit	1714
Examiner Name	

Attorney Docket Number

39262/330604

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Document Number Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US-3,531,561	09-29-1970	Trebu	
		US-3,636,956	01-25-1972	Schneider	
		US-3,736,646	06-05-1973	Schmitt	
		US-3,797,499	03-19-1974	Schneider	
		US-4,137,921	02-06-1979	Okuzumi	
		US-4,181,983	01-08-1980	Kulkarni	
		US-4,523,591	06-18-1985	Kaplan	
		US-4,539,981	09-10-1985	Tung	
		US-4,636,215	01-13-1987	Schwartz	
		US-4,938,763	07-03-1990	Dunn, et al.	
		US-5,108,755	04-28-1992	Daniels, et al.	
		US-5,192,301	03-09-1993	Kamika	
		US-5,266,608	11-30-1993	Katz, et al.	
		US-5,275,601	01-04-1994	Gogolewski, et al.	
		US-5,333,624	08-02-1994	Tovey	
		US-5,360,448	11-01-1994	Thramann	
		US-5,364,400	11-15-1994	Rego, Jr., et al.	
		US-5,417,712	05-23-1995	Whittaker	
		US-5,437,918	08-01-1995	Taniguchi	
		US-5,441,515	08-15-1995	Khosravi	
		US-5,470,334	11-28-1995	Ross, et al.	
		US-5,527,337	06-1996	Stack, et al.	
		US-5,562,704	10-08-1996	Tamminmaki, et al.	
		US-5,633,002	05-27-1997	Stricker	
		US-5,634,936	06-03-1997	Linden	
		US-5,660,846	08-26-1997	Cheikh	
		US-5,670,161	09-23-1997	Healy	
		US-5,690,671	11-25-1997	McGurk	
		US-5,695,497	12-09-1997	Stahelin	
		US-5,716,410	02-10-1998	Wang, et al.	
		US-5,716,413	02-10-1998	Walter, et al.	
		US-5,733,330	03-31-1998	Cox	
		US-5,760,118	06-02-1998	Sinclair	
		US-5,766,239	06-16-1998	Cox	
		US-5,766,618	06-16-1998	Laurencin, et al.	
		US-5,792,400	08-11-1998	Talja, et al.	
		US-5,834,582	11-10-1998	Sinclair	
		US-5,837,276	11-17-1998	Carnevale	
		US-5,893,850	04-13-1999	Cachia	
		US-5,904,658	05-18-1999	Niederauer, et al.	
		US-5,908,918	06-01-1999	Chen	
		US-5,968,092	10-19-1999	Buscemi	
		US-5,980,564	11-09-1999	Stinson	
		US-6,001,100	12-14-1999	Sherman, et al.	

Examiner
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Considered

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Sheet	2	of	6	Attorney Docket Number	39262/330604		

U.S. PATENT DOCUMENTS					
Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US-6,001,101	12-14-1999	Augagneur, et al.	
		US-6,005,161	12-21-1999	Brekke, et al.	
		US-6,113,624	09-05-2000	Bezwada, et al.	
		US-6,160,084	12-12-2000	Langer, et al.	
		US-6,162,225	12-19-2000	Gertzman, et al.	
		US-6,203,573	03-20-2001	Walter, et al.	
		US-6,248,108	06-19-2001	Tormala	
		US-6,248,430	08-2001	Toyoda, et al.	
		US-6,283,973	09-04-2001	Hubbard, et al.	
		US-6,293,950	09-25-2001	Lynch, et al.	
		US-6,344,496	02-05-2002	Niederauer, et al.	
		US-6,375,465	04-23-2002	Engman, et al.	
		US-6,436,136	08-20-2002	Flodin, et al.	
		US-6,468,277	10-22-2002	Justin, et al.	
		US-6,503,278	01-07-2003	Pohjonen	
		US-6,511,511	01-28-2003	Slivka, et al.	
		US-6,514,286	02-04-2003	Leatherbury, et al.	
		US-6,565,606	05-20-2003	Bruce, et al.	
		US-6,652,582	11-25-2003	Stinson	
		US-6,783,712	08-31-2004	Slivka, et al.	
		US-6,841,111	01-11-2005	Rickner, et al.	
		US-6,916,321 B2	07-12-2005	TehHuisen, et al.	
		US-7,033,603	04-25-2006	Nelson, et al.	
		US-7,261,716	08-28-2007	Strobel, et al.	
		US-7,261,734	08-28-2007	Gellman, et al.	
		US-7,268,205	09-11-2007	Williams, et al.	
		US-7,270,813	09-18-2007	Shimp, et al.	
		US-2002/0029043	03-07-2002	Ahrens, et al.	
		US-2002/0150775	10-2002	Ishikawa, et al.	
		US-2003/0114937 A1	06-19-2003	Leatherbury, et al.	
		US-2003/0125745	07-03-2003	Tseng, et al.	
		US-2004/0106734	06-03-2004	Rose	
		US-2004/0193154 A1	09-30-2004	Leatherbury, et al.	
		US-2004/0241203 A1	12-02-2004	Shakesheff, et al.	
		US-2004/0242722 A1	12-02-2004	Rose	
		US-2004/0258732	12-23-2004	Shikinami	
		US-2004/0265385	12-30-2004	West	
		US-2004/0267263	12-30-2004	May	
		US-2005/085313	04-21-2005	Nishitani	
		US-2005/0008672	01-13-2005	Winterbottom, et al.	
		US-2005/0013793	01-20-2005	Beckham, et al.	
		US-2005/0159812 A1	07-21-2005	Dinger, III, et al.	
		US-2005/0165128	07-28-2005	Cohn, et al.	
		US-2005/0177245 A1	08-11-2005	Leatherbury, et al.	

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				Examiner Name	
Sheet	3	of	6	Attorney Docket Number	39262/330604

		US-2005/0209705 A1	09-22-2005	Niederauer, et al.	
U.S. PATENT DOCUMENTS					
Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-OO-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US-2005/0240281 A1	10-27-2005	Slivka, et al.	
		US-2006/0067973 A1	03-30-2006	Schachter	
		US-2006/0136071	06-22-2006	Maspero, et al.	
		US-2006/0178748 A1	08-10-2006	Dinger, III, et al.	
		US-2006/0188547	08-24-2006	Bezwada	
		US-2006/0200150	09-07-2006	Homaki, et al.	
		US-2006/0247610 A1	11-02-2006	Lanphere, et al.	
		US-2006/0263335	11-23-2006	France, et al.	
		US-2007/0041950 A1	02-22-2007	Leatherbury, et al.	
		US-2007/0043376 A1	02-22-2007	Leatherbury, et al.	
		US-2007/0128154	06-07-2007	Hadba, et al.	
		US-2007/0134305	06-14-2007	Zilberman	
		US-2007/0191963 A1	08-16-2007	Winterbottom, et al.	
		US-2007/0240281 A1	10-27-2007	Slivka, et al.	
		US-2007/0299156 A1	12-27-2007	Brown	
		US- 2008/0045627	02-21-2008	Rose	

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		WO 1984/04311	11-08-1984	Hexcel Corp.	
		WO 1990/003768	04-19-1990	Southern Research Institute	
		WO 1995/034331 A1	12-21-1995	Aoforschungsinsti ut Davos	
		WO 1997/005193 A1	02-13-1997	Sanitaria Scaligera Spa	
		WO 1998/026814 A1	06-25-1998	JVS-Polymers Oy	
		WO 1999/011297 A2	03-11-1999	Univ. of Nottingham	
		WO 2001/096105 A2	12-20-2001	Owens Corning Fiberglass Corp.	
		WO 2002/076725	10-03-2002	Sicc	
		WO 2005/085313 A1	09-15-2005	Commonwealth Scientific and Industrial Research Organization	
		WO 2006/053936	05-26-2006	JVS Polymers Oy	
		WO 2006/064025	08-24-2006	Fidia Advanced Biopolymers	
		WO 2007/065074 A2	06-07-2007	Indiana Univ. Res. And Tech. Corp.	
		WO 2007/084609 A2	07-26-2007	Osteotech, Inc.	

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FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		EP 0 204 931 B2	12-17-1986	Biocon Oy		
		EP 0 401 844 B1	12-12-1990	Boehringer Ingelheim International		Claims
		EP 0 439 892 A2	08-07-1991	Kingston Technologies, Inc.		
		EP 0 531 487 B1	01-10-1996	Storch		Claims
		EP 1 056 487 B1	12-06-2000	MIT		
		EP 1 093 774 B1	06-19-2002	Karl Storz GmbH		Claims
		JP 2169612	06-29-1990	Asahi Chemical Ind.		Abstr
		JP 8196617	08-06-1996	Takiron Co.		Abstr
		JP 9040761	02-10-1997	Shimadzu Corp.		Abstr
		JP 9095606	04-08-1997	Shinetsu Chemical Co.		Abstr
		JP 9234241	09-09-1997	Shimadzu Corp.		Abstr
		JP 9272790	10-21-1997	Shimadzu Corp.		Abstr
		JP 9221539	08-26-1997	Shimadzu Corp.		Abstr
		JP 10176039	06-30-1998	Kanebo Ltd.		Abstr
		DE 39 36 188 A1	05-03-1990	Boehringer Ingelheim		Abstr
		DE 42 26 465 A1	02-11-1993	Gunze Ltd.		Abstr
		KR 141988 B1	06-15-1998	Samyang Co. Ltd.		Abstr

NON PATENT LITERATURE DOCUMENTS							
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		Andriano, et al., 'Processing and characterization of absorbable polylactide polymers for use in surgical implants,' <i>Journal of Applied Biomaterials</i> , 5(2):133-140 (1994)					
		Asano, et al., 'In vivo characteristics of low molecular weight copoly(D,L-lactic acid) formulations with controlled release of LH-RH agonist,' <i>Biomaterials</i> , 10(8):569-573 (1989)					
		Barca, et al., 'Resorbable poly-L-lactic acid mini-staples for the fixation of Akin osteotomies,' <i>The Journal of Foot and Ankle Surgery</i> , 36(2):106-111 (1997)					
		Bertrand, et al., 'Biocompatibility Aspects of New Stent Technology, JACC, 32(3):562-571 (1998)					
		Celikkaya, et al., 'Poly(DL-lactide)/Poly(ethylene glycol) Copolymer Particles. I. Preparation and Characterization,' <i>Journal of Applied Polymer Science</i> , 61:1439-1446 (1996)					
		Frenger, 'Biomedical Uses of Shape Memory Polymers,' <i>Biomed. Sci. Instrum.</i> , 29:47-50 (1993)					

Examiner Signature		Date Considered
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Sheet	5	of	6		
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		Fukuzaki, <i>et al.</i> , 'Synthesis of copoly(D,L-Lactic acid) with relatively low molecular weight and in vitro degradation, Japan Atomic Energy Research Institute, Gunma, Jpn, European Polymer Journal, 25(10):1019-1026 (1989)			T ²
		Giardino, <i>et al.</i> , 'Experimental evaluation of a resorbable intramedullary plug for cemented total hip replacement,' <i>Biomaterials</i> , 18(13):907-913 (1997)			
		Gautier, <i>et al.</i> , 'Poly(α -hydroxyacids) for application in the spinal cord: Resorbability and biocompatibility with adult rat Schwann cells and spinal cord,' <i>Journal of Biomedical Materials Research</i> , 42(4):642-654 (1998)			
		Haers, <i>et al.</i> , 'Biodegradable polyactide plates and screws in orthognathic surgery,' <i>Journal of Craniomaxillofacial Surgery</i> , 26(2):87-91 (1998)			
		Hyon, <i>et al.</i> , 'Effects of residual monomer on the degradation of DL-lactide polymer,' Hyon, Jamshidi & Ikada, <i>Polymer International</i> , 46:196-202 (1998)			
		Kaitian, <i>et al.</i> , 'Poly(D,L-Lactic Acid) Homopolymers: Synthesis and Characterization,' <i>Turkish Journal of Chemistry</i> , 20:43-53 (1996)			
		Kister, <i>et al.</i> , 'Effects of morphology, conformation and configuration on the IR and Raman spectra of various poly(lactic acid)s,' <i>Polymer</i> , 39(2): 267-273 (1998)			
		Koelling, <i>et al.</i> , 'In vitro real-time aging and characterization of poly(L/D-lactic acid),' <i>Proceedings of the 1997 16th Southern Biomedical Engineering Conference</i> (Cat. No. 97 TH 8270), pp. 197-201			
		Kontio, <i>et al.</i> , 'Fibrous wound repair associated with biodegradable poly-L/D-lactide copolymers implants: study of the expression of tenascin and cellular fibronectin,' <i>Journal of Materials Science-Materials in Medicine</i> , 9:10:603-609 (1998)			
		Kricheldorf, <i>et al.</i> , 'Polyactones: 32. High-molecular weight polylactides by ring-opening polymerization with dibutylmagnesium or butylmagnesium chloride,' <i>Polymer</i> , 36(15):2995-3003 (1995)			
		Losken, <i>et al.</i> , 'Memory of DL-polylactic acid biodegradable plates,' <i>Ann. Plast. Surg.</i> , 32(6):606-611 (1994)			
		MacDonald, <i>et al.</i> , 'Enzymatic degradability of poly(lactide): Effects of chain stereochemistry and material crystallinity,' <i>Macromolecules</i> , 29(23):7356-7361 (1996)			
		Mainil-Varlet, <i>et al.</i> , 'Effect of in vivo and in vitro degradation on molecular and mechanical properties of various low-molecular weight polylactides,' <i>Journal of Biomedical Materials Research</i> , 36(3):360-380 (1997)			
		Matsumura, <i>et al.</i> , 'Novel ring opening polymerization of lactide by lipase,' <i>Macromol. Symp.</i> , 130:285-304 (1998)			
		Morita, <i>et al.</i> , 'Intravitreous delivery of dexamethasone sodium m-sulfobenzoate from poly(DL-lactic acid) implants,' <i>Biological & Pharmaceutical Bulletin</i> , 21(2):188-190 (1998)			
		Okihara, <i>et al.</i> , 'Crystal structure of stereocomplex of poly(L-lactide) and poly(D-lactide), <i>Journal of Macromolecular Science-Physics</i> , B30(1-2):119-140 (1991)			
		Penning, <i>et al.</i> , 'Preparation and properties of absorbable fibres from L-lactide copolymers,' <i>Polymer</i> , 34(5):942-951 (1993)			

Examiner Signature		Date Considered
--------------------	--	-----------------

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Sheet	6	of	6	Attorney Docket Number	39262/330604

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		Pitt, et al., 'Modification of the rates of chain cleavage of poly(ϵ -caprolactone) and related polyesters in the solid state,' <i>Journal of Controlled Release</i> , 4:283-292 (1987)			
		Rak, et al., 'The preparation and characterization of poly(DL-lactic acid) for use as a biodegradable drug carrier,' Liverpool Polytech., Liverpool, UK, <i>Pharmaceutica Acta Helveticae</i> , 60:(5-6):162-169 (1985)			
		Ristic, et al., 'An investigation of synthesis and degradation of poly(D,L-lactide) and controlled release of albumin from biodegradable poly(D,L-lactide) cylinders,' ICheAP-2, the second Italian conference on chemical and process engineering, Florence, pp. 559-563 (1995)			
		Schliephake, et al., 'Reconstruction of the mandible by prefabricated autogenous bone grafts,' <i>Int. J. Oral Maxillofac. Surg.</i> , 26:244-252 (1997)			
		Stahelin, et al., 'Clinical degradation and biocompatibility of different bioabsorbable interference screws: a report of six cases,' <i>Arthroscopy: The Journal of Arthroscopic & Related Surgery</i> , 13(2):238-244 (1997)			
		Steendam, et al., 'The role of elastic relaxation in drug delivery from poly(DL-lactic acid) based tablets. A shape memory phenomenon,' <i>Proceedings of the International Symposium on Controlled Release of Bioactive Materials</i> , 25:128-129 (1998)			
		Stevels, et al., 'Blends van blok copolymeren die een poly(L-lactide) of poly(D-lactide) blok bevatten,' Biomedical Science and Engineering Meeting, pp. 107-110 (1994)			
		Tagil, "Thesis – The morselized and impacted bone graft animal experiments on proteins, impaction and load," <i>Acta Orthop. Scand. Suppl.</i> , 290:1-40 (2000)			
		Temenoff and Mikos, "Injectable biodegradable materials for orthopedic tissue engineering," <i>Biomaterials</i> , 21:2405-2412 (2000)			
		Tschakaloff, et al., 'Degradation kinetics of biodegradable DL-polyactic acid biodegradable implants depending on the site of implantation,' <i>International Journal of Oral and Maxillofacial Surgery</i> , 23(6 Pt 2):443-445 (1994)			
		Tsuiji, et al., 'Stereocomplex formation between enantiomeric poly(lactic acid). VIII. Complex fibers spun from mixed solution of poly(D-lactic acid) and poly(L-lactic acid), <i>Journal of Applied Polymer Science</i> , 51(2):337-344 (1994)			
		Zegzula, et al., 'Bone Formation with Use of rhBMP-2 (Recombinant Human Bone Morphogenetic Protein-2,' <i>The Journal of Bone and Joint Surgery</i> , 79:1778-1790 (1997)			
		Zhang, 'Biodegradable lactide polymers: synthesis, degradation, and controlled drug release properties (drug release), Queen's University at Kingston, Canada, Volume 55/01-B of Dissertation Abstracts International, p. i-xv, 1-179 (October 1993)			
		Structure and Properties of Orientated Polymers, Ed. I. M. Ward, Department of Physics, University of Leads, England, a Halsted Press Book, John Wiley & Sons, New York-Toronto (1975) Table of Contents			

Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered.
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